

CLINICAL MEDICINE

ORIGINAL ARTICLES

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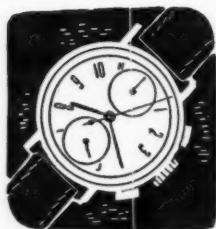
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Whole Blood and Its Substitutes

By GLENN S. ROST, M.D., *Lake City, Iowa*

CONSIDERABLE confusion still exists in the minds of many practitioners and general surgeons regarding the indications for, and use of, whole blood and its substitutes.

The need for clarity here is increasingly important as one realizes that all too frequently it is the general surgeon at must support the patient through these early, critical hours, following a major catastrophe whether traumatic, operative, or medical.

It is no less imperative that judgment be exercised if adequate results are to be obtained in the management of the medical problems created by the severe anemias, blood dyscrasias, hypoproteinemias, and allied disorders.

A brief review of the status of whole blood and its substitutes will simplify the thinking on this problem. The rationale of the use of whole blood depends upon certain fundamental physiological principles, set in motion by administration. Foremost of these are: (1) an immediate increase in circulating blood volume. Only slightly less important is (2) the increased oxygen carrying capacity of the blood. (3) Increased blood coagulability and (4) increased protein concentration are likewise fundamental.

When one remembers that a diminished circulating blood volume from hemorrhage or trauma is accompanied by a depletion of plasma proteins, and therefore a lessened osmotic pressure with inability to hold fluids in the vascular tree, by anoxia of tissue, increased capillary permeability, etc., it is readily seen that whole blood most nearly meets the major physiological needs requiring restitution. It should be realized that plasma is effective in restoration of blood volumes but that *there is no complete substitute for whole blood.*

The use of whole blood in severe hemorrhage is most desirable because here the cellular as well as the fluid element is lost, with resultant impairment in oxygen carrying capacity. The latter may be significant even in the severe chronic anemia which may predispose to inadequate tissue oxygenation and even produce an increased cardiac output.

Blood transfusion is an excellent method of increasing the total circulating proteins thus aiding in the alleviation of existent hypoproteinemia and serving as one of the most important factors in the maintenance of equilibrium between intravascular and extracellular tissue fluids.

The value of whole blood for purposes of hemostasis is well known. Plasma will serve here only for temporary support and rightfully has no role. There is no need to record the value of whole blood in such circumstances as the gastro-intestinal hemorrhage, obstetrical or post-surgical emergency, in some blood dyscrasias, and other allied circumstances.

The tendency to bleed observed in the hypo-prothrombinemia of obstructive jaundice, in biliary fistula, parenchymatous liver damage, hemorrhagic diseases of the newborn, ulcerative colitis, et cetera, usually yield well to vitamin K and bile salts, but even more readily to whole blood transfusions. The transfusion of fresh blood is preferable here because of the rapid diminution of the prothrombin content of preserved blood.

Numerous attempts have been and are still being made to utilize other substances in the place of whole blood, such as plasma, red cell suspensions, acacia, ascitic fluid, glucose solution and physiologic saline-solution. Of these, plas-

ma is certainly the most useful. It can be utilized to provide an increase of circulating blood volume, as well as an increase of protein concentration and will approximate the value of whole blood for these purposes. Under circumstances in which the oxygen carrying capacity is interfered with by virtue of loss of cellular elements as in acute hemorrhage, plasma becomes less useful, except for temporary support.

Suspensions of erythrocytes are not without merit in chronic anemia and can be satisfactorily used as a substitute for whole blood. Less difficulty and less expense are involved in their use. Matching can be effected by a pilot sample of blood accompanying this bottled bi-product of plasma preparation. Such suspensions are not usually available except in the larger centers.

In blood depletions not associated with acute hemorrhage or anemia, plasma may be equally effective and sometimes is to be preferred. Thus in peripheral circulatory collapse from local trauma, or the severe burn there is plasma loss. Hemo-concentration is the rule under these circumstances. Plasma will more effectively correct the diminished blood volume without the unnecessary addition of the red blood cells.

The use of plasma has certain real advantages. Foremost of these is its availability on short notice, without the necessity of testing compatibility, or of obtaining suitable donors.

Availability may at times govern the choice of replacement therapy. In this respect, plasma is by far the most practical for the individual surgeon removed from the large centers. Furthermore, it can be administered irrespective of blood type and without compatibility tests.

In summary, one may say that plasma is relatively free of reactions and may be given in large amounts or repeatedly. It does not increase hemo-concentration. Plasma may be stored longer and without refrigeration. Typing, as noted

above, is not necessary and filtration is not required. When available, blood from a blood bank is almost as readily usable and as previously mentioned may be even more satisfactory when combating shock and hemorrhage.

If one bears in mind that the life of the erythrocyte in the recipient diminishes in proportion to the length of time the blood was stored, it is immediately evident that blood stored longer than three days should not be used if the prime purpose of the transfusion is to provide functioning erythrocytes. Blood stored for three days or less is essentially equivalent to that of whole blood. Whereas that stored longer than seven to ten days will not provide erythrocytes that are useful for any length of time in the recipient's blood. The effective action of blood platelets, prothrombin, complement, et cetera, are all depressed with storage beyond seven to twenty-one days.

It may be stated that stored blood is effectual in the treatment of shock and acute hemorrhage but is definitely inferior to fresh blood when used in the treatment of acute and chronic infections, hemorrhagic states, blood dyscrasias, and the anemias. Three days should be the maximum storage period for these purposes.

No discussion of blood should omit the Rh factor. It is mentioned here only to point out that Rh positive blood of unknown Rh classification should not be administered to any female prior to the termination of the child bearing period unless it is positively known that that individual was under no circumstances, become pregnant.

In the face of urgent emergency, the value of blood in quantity and at time at a rapid rate of inflow cannot be minimized. This fact is well known to military surgeons and to a less extent civilian surgeons, who sometimes find it necessary, where blood loss was rapid and continuing, to set up two, or even

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three transfusions flowing into the same patient through different veins. The same effect can be obtained by the administration of blood under positive pressure, where the acute shocking

catastrophic blood loss makes quantity replacement urgent.

Strumia and McGraw have briefly summarized the specific indications for plasma and whole blood as follows:

	Use:
Shock	Plasma
With little or no hemorrhage	Plasma for immediate relief, followed by whole blood
With severe hemorrhage	Plasma. Whole blood contraindicated because of hemoconcentration
Burns	Plasma supplemented by whole blood if severe anemias are present
Infections	Concentrated plasma
Cerebral edema as in injuries, toxemias, etc.....	
Blood dyscrasias	
Those with hemolytic tendencies	
with low prothrombin content	Plasma
Those with hemorrhagic tendencies, purpura...	Whole blood
Anemia—for palliative purposes in various hypoplastic forms	Whole blood. Plasma in hypoproteinemias
Acute poisons affecting the oxygen carrying capacity of hemoglobin as in carbon monoxide poisoning	Whole blood

Biological False Positive Reactions in Serological Tests for Syphilis

The diagnosis of syphilis should never be based solely upon a single positive blood serological report. It is known that biological false positive reactions may result from malaria, infectious mononucleosis, virus pneumonia, recent pneumonia and other infectious diseases. It is also established that the so-called "verification tests" are not sufficient to confirm a diagnosis of syphilis on serological grounds. The differentiation between true and false positive tests can be made only by 1) confirmation of the diagnosis by clinical and epidemiological evidence and 2) the serial determination of the quantity of reagin in the blood at intervals of several weeks and during the periods of three to six months or at times.

Ordinarily the reagin titer in quantitative serological tests is low in patients with false positive reactions and relatively high in patients with syphilis. There are, however, exceptions in that patients with false reactions will occasionally demonstrate a high titer while pa-

tients with known treated or untreated syphilis will have low titers. In the majority of patients with biological false positive reactions, the titer of reagin tends to fall or to become completely negative whereas in syphilitics the titer remains fixed or, in new infections, actually rises.

In the majority of patients with acute infectious diseases in whom a positive serological test is obtained, the test becomes positive during the acute febrile stage and reverts to negative within a few days or weeks thereafter. The common occurrence of infectious mononucleosis suggests the advisability of a heterophile antibody test where false biological reactions are suspected.—C. D. MARPLE, M.D.

REFERENCES

- Moore, Eagle & Mohr: Biological False Positive Serological Tests for Syphilis, III. A Suggested Method of Approach to Their Clinical Study: *J.A.M.A.*, 115, 1602, Nov. 9, 1940.
 Beerman: Biologic False Positive Reactions to the Tests for Syphilis: *Am. Journ. Med. Sci.*, 209, 525, April 1945; 210, 524, Oct. 1945.

Clinicopathologic Conference (Case 5)

A 36 year old graduate nurse complained of irregular and profuse menstrual bleeding.

Previous history: Onset of menstruation at age 16; menstruations always irregular and profuse. At age 20, appendectomy and salpingectomy, unilateral, were performed. The tube was thought to be tuberculous.

Amenorrhea for long periods of time followed by profuse bleeding, occurred during the next 12 years, despite administration of many endocrine preparations. Chorionic gonadotropin (Antophysin) administration resulted in regular, normal periods for 2½ years. Menstruation then again became infrequent and profuse. For 6 months, the uterine bleeding had been almost continuous.

Obesity (230 pounds) was always present. The patient's father died of tuberculosis when she was 3 years old and a younger sister had pulmonary tuberculosis.

Examination: Negative physical examination except for slightly enlarged uterus; normal pulse, temperature, respiration; blood pressure 120/74.

Red blood cell count 3,570,000, hemoglobin 10 Gm., white cell count 5,100 (66 percent neutrophils, 27 percent lymphocytes, 5 percent monocytes, 2 percent eosinophiles).

Urine: 1.020 specific gravity, trace of albumin; few white cells in sediment.

Blood Chemistry Examinations: Serum protein nitrogen normal; protein 5.9 Gm. per 100 cc.; glucose tolerance test fasting blood sugar of 105 mg. per 100 cc, which rose to 185 mg. at 2 hours and 162 mg. at 3 hours. Basal metabolic rate: plus 1 percent. Blood Hinton serologic test negative. Tuberculin test strongly positive. X-rays of skull, spine and urinary tract negative.

Differential Diagnosis

In any bleeding patient, at any age,

diagnostic dilatation and curettage and removal of suspicious areas on the cervix should be carried out. Vaginal smears may also reveal cancer cells. *Dilatation and curettage should be performed before giving any endocrine preparation.*

If chorionic gonadotropin regulates the menstrual cycle, it implies that it was on an endocrine basis (error—Editor), but malignancy cannot be ruled out.

The family history of tuberculosis and the reported removal of a tuberculous tube may be discounted by the fact that there were no other signs of tuberculosis (subconsciously, we assume that any overweight patient does not have a tuberculous infection.—Editor).

Carcinoma was probably not present because of the long history of bleeding.

Amenorrhea followed by profuse flow is the picture of functional uterine bleeding (metropathia hemorrhagica, endometrial hyperplasia) a specific thickened, with deep glands having the swiss cheese appearance characteristic of estrin effect.

Clinical Diagnosis: Endometrial hyperplasia.

Operation:

Dilation and curettage: A large amount of material was removed; microscopic examination proved it to be type of functional uterine bleeding with continuous estrinism and lowered secretion of progesterone (thus the administration of estrogen is contraindicated.—Editor). It is an alternating amenorrhea followed by continuous flowing, usually without dysmenorrhea, which may have been present in normal menstrual cycles. The endometrium is markedly tuberculous. The other tube and the entire uterus were then removed; tuberculosis was found in both tube and uterus.

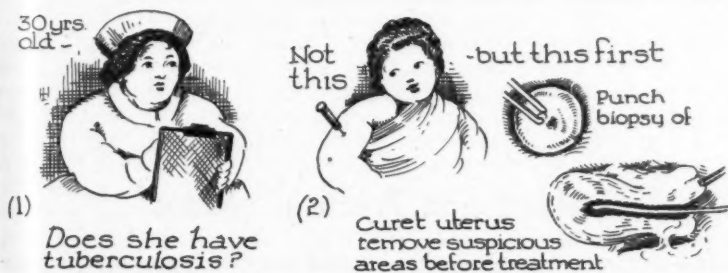
Anatomic Diagnosis: Tuberculosis (3)

tubes and uterus. (Summary of material presented at Massachusetts General Hospital, Boston, April 12, 1945).

Office Procedure

Dilatation and curettage would not be put off so commonly if the procedure were carried out in the physician's office in many cases. Under local anesthesia (see *Clinical Medicine* pictorial section, Aug. 1946, p. 227, for technic) or intravenous anesthesia, curettage and removal of suspicious areas on the cer-

vix can easily be carried out. The uterus usually requires no pack afterward; if the cervical biopsy area bleeds, merely pack Oxycell (oxidized gauze) against it. This new type of gauze gradually breaks down, thus removal is not necessary. The scrapings and other material are placed in formaldehyde solution (9 parts water and 1 part ordinary formaldehyde obtainable at any drugstore) and sent or mailed to a competent pathologist together with a brief summary of clinical history. Most patholo-



AGE



SIZE OF UTERUS



Other pathologic factors determine uterine size

ENDOMETRIAL HYPERPLASIA

A Common Condition

SYMPTOMS: 1) Excessive and prolonged menstruation, or 2) periods of amenorrhea followed by long, irregular bleeding - (3) No dysmenorrhea, even with excessive bleeding

LESION



DIAGNOSIS



Dilatation & curettage removal of suspicious areas of cervix. Pathologic examination

TREATMENT

Young woman: Curettage (repeat - if necessary.) Middle life: Curettage (rule out carcinoma)

Recurring bleeding after curettage or radium therapy demands a hysterectomy

(3)

gists welcome the opportunity of such consultation; the usual fee is five dollars.

All areas of the uterus must be curetted, to make sure that a small lesion is not overlooked. Equipment: Dilators, small and large curet, biopsy punch for cervical lesions, oxidized gauze, vaginal speculum, light.—R.L.G.

What This Conference Teaches

1. The patient's history should be taken and considered. There was ample evidence of exposure to tuberculosis

and a positive tuberculin skin test. This was disregarded, possibly because of the relative rarity of tuberculous involvement of the genitalia, because the patient was overweight and because the history could be made to fit a diagnosis of endometrial hyperplasia.

2. A curettage with pathologic examination is essential for diagnosis.

3. A summary of the present day knowledge concerning endometrial hyperplasia, taken from facts presented at this conference and from current literature.

Trained and Practical Nurses

Too much stress has been placed upon academic training and nursing. The primary function of nursing is the care of the patient and this has been subordinated to scientific and social subjects. However, the modern nurse has a working knowledge of many complicated technics; including the use of oxygen tents, respirators, various decompression apparatus, the subcutaneous, intramuscular, and intravenous use of powerful drugs.

Trained nurses should be reserved for the more complicated, strictly nursing, and even partly medical procedures. Simple bedside tasks should be entrusted to a less trained group designated as Attendants, or even an untrained but useful group called Helpers.

Ward housekeeping should be done entirely by a maid and male cleaners or porters. It is better to place the untrained personnel under the direction of the head nurse, rather than the hospital housekeeper or matron.

The number of young women interested in Attendant work is disappointingly small.

Salary scales should be adapted which

would establish a basic wage rate starting at graduation and increasing with the length of service and advancing responsibility. For example, the pay of a recent, graduate, general duty nurse would be . . . X dollars, at the end of 6 months, this amount would be automatically increased by \$5.00 per month. 6 months later an additional \$5.00. Evening or night duty would add another \$5.00 per month. The salary for head nurses, supervisors, instructors and directors would be increased on the same pattern. These are cash figures. If maintenance were provided by the hospital, suitable deductions would be made.

The rate for private duty nurses may be fixed so that the work year would produce approximately the same financial return. Thus, for 290 days of nursing, both the general duty nurse and the private duty nurse would receive approximately the same salary. An 8 hour day, and 48 hour week are strongly recommended. The 8 hours should be consecutive, except under unusual circumstances, and only for a limited period. —N. W. Faxon, M. D., Dir. Massachusetts General Hospital, Boston, in "The Doctors Talk it Over," March 17, 1943.

Simplified Tonsillectomy

By R. L. GORRELL, M.D., *Clarion, Iowa*

A TONSILLECTOMY can be a simple procedure, easy to perform and without strain on the surgeon, if certain requisites are met: 1. The tonsils must be clearly visible at all times, 2. the tongue must be retracted out of the way and 3. sufficient room must be provided to enable several instruments to be placed in the throat at one time.

The device illustrated has been used by many surgeons including my father in otolaryngologic practice for 20 years, and by myself for 12 years, so that it is not on an experimental or trial basis. The entire instrument can be sterilized by boiling or in cold germicide without harm. It is sturdily built.

The only reason for this clinical note is that many men performing tonsillectomies are not aware that such an instrument as the Tonsilassistant (Cameron) exists; they continue to struggle with outmoded head mirrors, headlights, gags, and so on.

Its use requires three steps: The

teeth are separated and the gag slipped into place. This is made of smooth metal so that there is no injury to the teeth or gums. The jaws can be speedily separated by turning the handle shown at left, the instrument locking in position at any joint desired.

The light is slipped into the roof of the mouth and held in position by a half turn of the screw. Thus a light is provided inside the mouth, yet out of the way. The anesthetist, a nurse or an assistant may aspirate blood or mucus from the throat or hold hemostats properly without the need for additional light.

The tongue is retracted out of the way by the tongue blade, which is curved so as not to depress the tongue and force it toward the lateral aspects of the mouth.

When the tonsils have been removed, the brilliant light permits one to retract the anterior pillar and to carefully inspect the fossa for tonsil remnants.



Fig. 1. illustrates the instrument in position but without the tongue retractor. The clear field is excellently illustrated.



Fig. 2 depicts the lateral view with the instrument in place.

Sex Notes

By R. L. GORRELL, M.D.

Clarion, Iowa

THERE are many misconceptions that have come down through years of ignorance and persistence of unfounded belief.

Masturbation

One of the most widespread misconceptions is in regard to masturbation, both in the male and female. Many lay persons and a few physicians still feel that masturbation in boys and young men is very harmful; directly responsible for, and leading toward insanity, weakness, inability to enjoy intercourse, and so on.

Interested workers with boys have long since shown that the chief harm done by masturbation is by the fear that is implanted in the mind of the boy that he has injured himself by this practice. Common sense should tell anyone that a practice carried out by 90 per cent or over of a certain group cannot be considered abnormal but must be considered a normal reaction to the sexual development of the individual. Practically all boys masturbate at one time or another, and in many men the habit is kept up, at least at intervals, throughout adult life.

Masturbation in the adult male is not a well known subject but is, apparently, fairly common for a number of reasons, such as: Difficulty in obtaining partners for intercourse when men are away from home; when they are not acquainted; when they are afraid of venereal disease, or for other reasons.

Masturbation does not require a partner and, in the male at least, it is closely enough related to intercourse to give some enjoyment and there is no fear of venereal disease or of beginning a pregnancy. In Service, it was used by

many men to relieve the physiologic tension that came from days, months and even years of separation from normal intercourse.

To say that it caused serious harm would not be justified. In men with stronger-than-average sexual drive, it served to keep them from becoming emotionally upset and to relieve physical tension. Other men welcomed it to avoid the distraction of the low type of women often available in the United States or abroad.

Masturbation in the adult female has been said to decrease enjoyment of intercourse. This is based on the supposition that the height of sexual satisfaction in the adult woman is transferred from the outward zone of the breast and the clitoris to the vagina, but that this is not always true is proven first by the fact that a large percentage of girls masturbate at one time or another, and in single women the practice is often kept up for many years. This is also true of some married women who masturbate at times.

It must not be forgotten that some women are never sexually stirred up sufficiently by preliminary sex play (stimulation of the breasts, lips, and clitoris) to fully enjoy intercourse, to have an orgasm and to be able to relax. Such women by massaging the clitoris may obtain an orgasm and with it full enjoyment.

Sexual Enjoyment

It must be remembered that in intercourse, the penis is constantly moving against the clitoris, so there is stimulation of both the clitoris and the vagina. This is especially true if the woman's thighs are not separated too widely. For this reason the conventional spreading is

of the thighs widely apart may result in less stimulation of the clitoris and less satisfactory enjoyment for the woman.

To separate the sex act itself from the preceding and following events, is a simple matter but it is an unnatural classification. Mutual companionship should lead from the mental field to the physical, to satisfaction, to relaxation, and to a continuance of companionship.

Because this ideal course is often not followed, there is a tendency to think of intercourse as a short method of obtaining physical satisfaction for one or both partners, without considering its relationship to their need for companionship, both physical and mental.

Happy sexual relations help to cement cheerful companionship, but even

the most enjoyable of sexual contacts does not make up for the physical accompaniment or psychic letdown from a partner who is not emotionally qualified. In other words, the sexual act is just one phase of a well-rounded companionship. When placed in its proper perspective, it is neither the whole of marriage nor is it the least important.

As in any other teamwork, for either party to insist on performing the sexual act without relating it to the other needs and desires is to interfere with the emotional balance needed for enjoyment. Freud has said that the best sedative is a completely satisfactory sexual contact. This is true only if under proper conditions and approached with mutual desire.

Sex in Gynecology

By WILLIAM F. MENGERT, M.D.

Southwestern Medical College, Dallas, Texas

WHEN one comes to consider the relations of matters sexual to medical practice he runs at once into two dangers, neglect and too great consideration.

In the field of Obstetrics and Gynecology, of course, in one sense all of our problems, except those of tumors and injury unrelated to childbirth, refer to sex.

In answering your three questions, it is a little difficult to give a blanket reply.

1. What should the physician know of sexual matters of his patients and when should he suspect them as the cause of symptoms?

Answer: There is certainly no question in my mind but that at least half of the pelvic pain we see in women is due to pelvic neurosis and this neurosis is almost always associated with sexual

maladjustment. Please do not misunderstand; sexual maladjustment is by no means the sole cause of pelvic pain, but is a tremendous factor in pelvic neurosis. From the practical standpoint, the physician confronted by a patient with pelvic pain and finding no acceptable genital disease entity should immediately suspect a neurosis. By "acceptable disease entity" I mean readily recognizable disease of uterus, tubes and ovaries other than retroversion or the much maligned "cystic ovary."

2. What part do sexual maladjustments play in daily life and in medical practice?

Answer: A considerable part in Obstetrics and Gynecology but perhaps not so great a part in other fields of medicine.

3. What can the physician do to help?

Answer: One is tempted to be very trite in the answer of this question and to say, "By being better trained, not only in the field of psychiatry but more especially in general diagnosis." My impression of the average practitioner of medicine in the United States is that his interest centers around "doing something" for the patient, irrespective as to whether or not that something

may or may not be indicated. If the physician has a greater knowledge of gross pathology as seen in the average individual, and above all if his knowledge is sufficient to enable him to say that the symptoms are not explained by the findings, then he is privileged to suspect a neurosis and to search for either a financial or a sexual basis for the neurosis.

Sexual Physiology and Social Maladies

By WINFIELD SCOTT PUGH, M.D. (Urologist)

New York City

FROM the hue and cry being raised at the present time, one would think that the military man is the only one ever to be afflicted with venereal disease. Such reasoning is far from the truth. The only difference between the soldier and civilian is in the matter of uniform. The reason so much is known regarding any malady attacking troops is incident to the fact accurate records are always available; in civil life any estimates of infection are notoriously inaccurate. You will ask if there is not a great reduction in military efficiency incident to social disease? This is true. Years of experience have taught me that these plagues are rampant. Their tentacles reach far and wide, striking at the very bedrock of our existence, namely, the reproductive organs. Can such a situation be prevented and if so, why is it not done?

The prevention of social or, to give them their more readily understood (if less liked term), venereal diseases is readily possible. This I have myself demonstrated in 150,000 exposures with but little resultant infection. How this was accomplished will be explained later.

You will now ask: why cannot others achieve similar results? They can, and their reason for not doing so is because of a failure to consider the human element involved. It is all very pretty to say, have an adequate number of chaplains, with frequent services at which the lads are taught the great benefits of continence. Every buck private of the slightest degree of intelligence knows that such teaching is false and forever loses respect for those ranting such nonsense. We are all quite well aware what children think of parents relating that fairy tale as to how Papa and Mama found them in a hollow tree or something equally as silly.

Does it do any good to locate camps far as possible from large cities with the idea men will have less access to women? Not a bit of it! In this connection I recall a little incident happening during the last war. We were all forbidden to enter a town twenty miles away, because several thousand girls were employed there in a powder plant. It was a difficult place to reach but that's where one met all his friends. Yes sir! from those issuing the orders to the lowliest gob. On another occasion I was asked

by an officer to see the nine foot wall he had built around his compound to keep out the lewd women. My comments on his lads cannot be given here in exact words, but it was to the effect that any man who could not get over a nine foot wall must have been suffering from some form of paralysis.

We are told by another group: officers and men should not be reminded of venereal disease or that prophylactics will be supplied to them which readily ward off any social malady. Thus you see, says the self-styled pure in heart, the lads will not be reminded of the sexual relationship and thereby abstain. Tell me honestly, does any normal human being have to be reminded of this second most potent appetite? For food, he mildly awaits mess signal, but carries little when it comes to the mating call. Kipling well said, 'men who live in barracks cannot be made plaster saints.' I would add, neither will this happen to any man, anywhere under the sun.

Now as to the very severe folks, they would have the men so quartered it would be a physical impossibility to reach the opposite sex. My answer to this is, that when you deprive lads of the normal, disease is sure to take its place. I cannot go into detail much as I would like to, but all those who read the daily papers are aware of what happens in prisons.

Do you suppose those who recommend intolerable conditions for our boys would accept the same treatment for themselves? Certainly not! All this reminds me of the drunken congressmen who sat on their gluteal muscles and voted for prohibition.

We see in our schools sexless manikins; yet, if we really and truly revere God, why should we be ashamed of the gifts with which He endowed us. You must also remember that God, the creative force, nature or whatever you wish to call it, also gave us organs known politely as orchids or testicles, each one

of which contains half a mile of cells for the production of male fertilizing elements.

Sex is a perfectly normal activity and will not be denied. It is not an evil designed by the devil in an attempt to drag man down into sin, but a God given function intended to render him capable of surmounting many obstacles in life. The reproductive element involved is purely a secondary consideration. I might also add, nature is not interested in marriage and we all have the desire whether thinking of the holy bonds of wedlock or not. Frustration fills the parlors of the psychiatrist and mental healer.

This is the answer, shorn of all the fancy raiment: I have made it quite plain that men must and will have intimate contacts with the opposite sex. Our legislators do everything in their power to prevent it. There is a widespread idea in America that we must have no prostitution. The historian Lecky has well said "that institution has saved many a home." It is not necessary to go into detail regarding this as every intelligent person must realize what is meant. What substitute do we offer for prostitution? The answer is, like it or not, somebody's daughter.

Not long ago I was asked to give a little talk on my experiences in venereal prophylaxis. "Ah," said the chairman, "we are not interested in chemical, but rather in moral prophylaxis and the abolition of prostitution." My reply was, better men than you have tried that since the beginning of time and the oldest profession is still with us. When I told of the terrible results of complete isolation of males, it was suggested I had been reading too much Havelock Ellis, Freud, and so on. Unfortunately my own experiences rendered such collateral reading entirely unnecessary.

In 1906, I was interested in safeguarding the health of large groups of men. It was not beneath my dignity to instruct the denizens of the segregated

districts in the proper care of their bodies and have them examined at intervals for the detection of venereal disease. I fully realized this was no small problem and could not do it sitting at my desk. Some will say, the woman will probably be infected by her next customer. Not if he has been examined by a physician and is scrutinized by the lady in turn. If we are not lazy, there is always a way. I have heard so much about failures in such inspections, but as a general rule, they are not founded on fact or the physician was too indolent to exert proper supervision.

I strongly believe in public houses and regimentation of their inhabitants. This idea is perhaps not exactly perfect, but the next best thing to it. Now so far as the men are concerned, they must be instructed in the necessity for prophylaxis. That is too big a story at this time. Prophylaxis must also be compulsory. I remember an occasion when my senior officer told me, such an enforcement interfered with the personal rights of man. I could give lectures and no doubt all would volunteer. Over one thousand men were involved. On the first tryout, 500 men went into the city and about 300 took the prophylaxis. The next day, 500 went on liberty and 100 took the prophylaxis and in a few days we found our office being visited by only a few really enlightened men. It was all too much bother. As you might expect, my attempts in this first experiment were a complete failure because of the fact, there was no big stick to aid me. Our venereal disease rate was soon 35 percent. This meant more than one third of our men were incapacitated in varying degrees.

In our next experience things went as I wished. Segregated districts were inspected as so were the men of my group and compulsory prophylaxis was the order of the day. I directed that the prophylaxis station in the heart of the segregated district be visited within an hour after exposure. Any prostitute

found infected was put under treatment. Our venereal disease rate dropped to less than one percent.

When the early experiments became public property, many nasty insinuations were made regarding my character, as at that day any medical man devoting attention to venereal disease was considered as anything but a noble citizen. That did not stop me and the good work went on.

In 1916, among the many duties that came a surgeon's way was a series of lectures to reserve officers on the duties of the military medical officer. In this course, he stressed the importance of venereal disease prevention in keeping men fit to man the guns. Everyone saw the point and the lecturer felt well pleased. It was not long after that a powerful organized group in civil life recommended to a high government official that the surgeon be severely disciplined for what they regarded as his pernicious activities. Yes, he was guilty of protecting our lads from disease, but if that is a crime, certainly it is one to be proud of.

As another department of the government came out with a campaign almost identical to his, our surgeon's career was not terminated.

It is my opinion that sexual activity cannot be a crime or a sin, either in the married or single when it is mutually agreeable. The fact that St. Paul said, 'marry or burn' does not change my mind. Sex hunger is very real and will not be denied. Then why not make it safe as possible.

Summary

1. In this brief discussion I have tried to make plain that sexual congress is a natural function and will not be denied.

2. I am sure every intelligent person knows what has just been said. Then why try to deny it?

3. Recognition of the human element involved, alone provides an adequate

basis for the prevention of venereal disease.

4. Any form of moral suasion or preaching; even punishment, is doomed to failure.

5. Whether we like it or not, some form of thoroughly supervised prostitution similar to the German Corps system is a necessity to reduce venereal infection rates.

6. Chemical prophylaxis along with the above may not be one hundred percent perfect, but what is? However, it can be made to so greatly reduce the

incidence of disease, that it is well worth while. Every experienced military man knows this, even though he risked the wrath of the mighty in trying to protect his men.

7. Do not forget, sex hunger is real; very real and one does not have to be told of it.

104 East 40 Street.

[In presenting Dr. Pugh's ideas on the necessity of sexual relations for normal men, no attempt should be made to infer that the author's personal ideas agree with that of those of the Publisher or Staff of Clinical Medicine.—Ed.]

Fatigue and Weakness

By THERON G. RANDOLPH, M.D., *Chicago, Illinois*

THE complaints of fatigue and weakness, although commonly encountered in the practice of medicine, are far less frequently explained to the satisfaction of either the physician or the patient.

In cases where organic disease has been excluded as a result of a negative physical examination, blood studies, basal metabolism, x-rays and other laboratory information, the medical profession has been more and more inclined to assume that some type of "nervousness" is the responsible mechanism. This point of view is well expressed by an investigation of 300 cases by Allan¹ in which examination was requested because of the complaint of fatigue, weakness or weak spells. He found that physical disorders explained the complaints in only 20 per cent. The remaining 80 per cent of fatigue cases were allegedly the result of a "nervous condition," the majority of which were said to be suffering from a "benign nervousness."

Although this mechanism may be operating in certain instances, it is highly improbable that all otherwise unexplained cases of fatigue and weakness are on such a basis. When confronted with this problem, it is often more expedient for the physician to assume that "nervousness" is the cause of chronic fatigue than to search farther for more factual information.

One cause of fatigue and weakness not usually associated with significant abnormalities of the physical examination or laboratory studies, occurs in the patient with allergic manifestations. The conception was first clearly described in the medical literature by Rowe in 1928². It has received little subsequent emphasis, however, with the result that the majority of such cases are overlooked. The clinical picture was more recently described by Randolph.³

Suggestive Symptoms

The weakness or tiredness in these

patients is characterized by the fact that it is unrelieved by excessive rest, usually more pronounced in the early morning hours, commonly associated with tenseness, "giddiness", or muscle drawing and aching, and is often related to mental confusion and difficulty in performing tasks requiring maintenance of attention or concentration. This type of fatigue may occur at any age; it is most commonly associated with a history of allergic headaches, chronic nasal allergy or gastro-intestinal allergy.

Although fatigue of allergic origin is occasionally associated with inhalant reactions, it is more commonly the result of uncontrolled food sensitivity. In such cases the diet is usually not suspected and specific dietary offenders are rarely detected by the patient. The foods most commonly incriminated are those eaten most frequently; wheat, corn, milk and eggs head the list.

Diagnostic Procedures

Fatigue of undetermined origin, particularly if associated with other evidence of clinical allergy, should be studied by means of diagnostic procedures to detect specific food sensitivity. Perfunctorily performed skin tests with food allergens are not sufficient in view of the unreliability of positive skin tests to diagnose specific sensitivity or of negative skin reactions to rule out such a possibility. These cases are ideally studied by means of individual food tests^{4,5} with several of the major allergenic foods or by standardized and detailed diagnostic elimination diets as suggested by Rowe⁶.

The specific elimination of offending foods is apt to be followed by a striking relief of symptoms, providing the num-

ber of allergenic foods is not too great so as to make elimination impossible.

The majority of such cases having fatigue as the presenting symptom have been previously suspected of being neurotics—a point of view which not only failed to bring improvement but one which usually resulted in further confusing the patient.

Where chronic uncontrolled allergic disease is apparently associated with psychosomatic disease, the significance of the latter can be appraised to better advantage after an attempt has been made to control the allergy.

700 N. Michigan Avenue.

BIBLIOGRAPHY

¹ Allan, F. N.: The differential diagnosis of weakness and fatigue. *New England J. Med.*, 231:414-418, 1944.

² Rowe, A. H.: Food allergy. Its manifestations, diagnosis and treatment. *J.A.M.A.*, 91: 1623-1631, 1928.

³ Randolph, T. G.: Fatigue and weakness of allergic origin to be differentiated from "nervous fatigue" or neurasthenia. *Annals Allergy*, 3:418-429, November-December 1945.

⁴ Rinkel, H. J.: Food allergy II. The technique and clinical application of individual food tests. *Ann. Allergy*, 2:504-514, 1944.

⁵ Randolph, T. G., and Rawling, F. F. A.: Blood studies in allergy. V. Variations in total leukocytes following test feeding of foods. *Ann. Allergy*, 4:163-178, May-June 1946.

⁶ Rowe, A. H.: Elimination Diets and Patients' Allergies—A Handbook of Allergy. 2nd ed. Philadelphia: Lea and Febiger, 1944.

(A recent suggestion by Urbach as to the identification of patients that are allergic to food: Give the patient water and sugar for several days. If symptoms are entirely relieved food allergy is the cause. One food may then be added, at three day intervals, to determine which foods cause a recurrence of symptoms. Competent allergists are now located in all large cities.—Ed.)

With some doctors a code of ethics is like a chorus girl—only a matter of form. The worst professional wrongs ever done to me were not the acts of young, poor, struggling doctors, but of elderly men so prominent that they thought ethics was never meant to apply to them.—J. C. DaCosta.

Varicose Vein Injection with "Air-Block" Technic

A simplified technic for the injection of varicose veins is proposed by Egmont J. Orbach, M.D., of New Britain, Connecticut. (*Clinical Medicine* original pictorial section)

Types of veins: This technic is not suitable for veins with small lumens or for veins which are prominent only when the patient is standing. These are injected with the veins full of blood, in the usual manner.

Technic: With the patient sitting or standing, a tourniquet is applied above the vein to be treated (after more experience, the tourniquet may be omitted). 1 to 3 cc. of the sclerosing agent and a similar amount of air is aspirated into a syringe, and a 26 gauge $\frac{1}{2}$ inch needle attached.

The syringe is held with the needle upward, so that the air is above the agent. The needle is inserted into the vein, as proved by the appearance of blood in the syringe, the air is injected and the sclerosing solution immediately injected, with one continuous movement.

After completion of the procedure, a piece of gauze is tightly applied to the site of the injection and kept in place with adhesive tape. The leg is supported with an elastic bandage.

Comments: In injecting superficial and transparent veins, the entering air can be seen to expel blood from the vein and the solution replaces the air filled space. A chemical thrombus forms immediately.

"The takes of the new method are about 10 percent better than with those of the conventional method. The reactions are about the same in both series (see attached table)."

"A great advantage of the new method is the avoidance of slough. It seems to me that with the new method less sclerosing agent is necessary, but I have

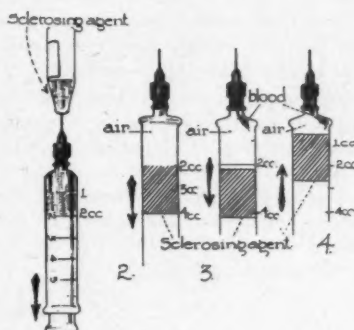


Fig. 1. Aspirate 1 to 3 cc. of the sclerosing agent into the syringe. Fig. 2. Aspirate a similar amount of air. Fig. 3. Insert needle into vein and aspirate blood. Fig. 4. Inject air and sclerosing fluid in one continuous movement; if emphysema appears, stop injection.

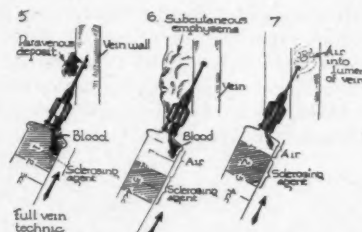


Fig. 5. Dangers of full vein technic: Only half of the tip of the needle lies in the lumen of the vein. If the sclerosing agent is injected in such a case, a perivenous deposit will result.

Fig. 6. Advantages of the "air-block" method: Although the needle point is only halfway into the vein lumen, no perivenous injection results. The appearance of air around the vein warns the physician to stop the injection.

Fig. 7. The "air-block" method is given with the patient standing. After assurance that the needlepoint is fully within the vein, the air plus the sclerosing agent is injected with one continuous motion of syringe plunger.

to prove this by further investigation. There was no case of deep slough in the series of the new method, as opposed to 4 cases of deep slough with the conventional method. The 2 cases listed with the new technic were only superficial and healed within 3 weeks."

"By injecting the air first into the vein, the practitioner has a safeguard against paravenous injection (outside the vein). If the point of the needle is not entirely inside the lumen of the vein, an emphysema will appear, be recognized and the physician will not inject the sclerosing agent."

"It very often happens that the point is not entirely inside the lumen of the vein, although blood appears inside the syringe. If the sclerosing agent is injected in such a case, damage is done to the paravenous tissues."

	OLD Series of 293 injections of conventional method	NEW Series of 293 injections of "air-block" method
Takes	212 (72.3%)	241 (82.3%)
Partial Takes..	11 (3.7%)	23 (7.8%)
Reactions	35 (11.9%)	23 (7.8%)
Sloughs	15, including 4 deep sloughs (5.4%)	2, no deep sloughs (0.7%)

The Retained Placenta

MANUAL removal of the placenta is being performed frequently in practice, yet it is frowned upon in most teaching centers and in many texts.

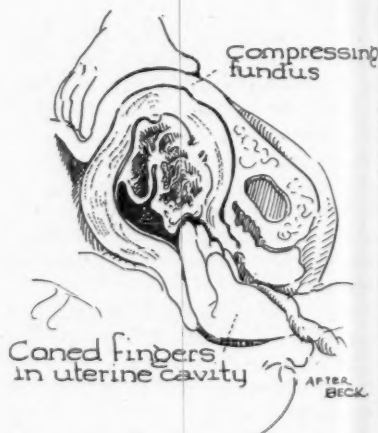
It is a relatively safe procedure if performed under aseptic conditions. It is much safer than very vigorous external attempts at forcing the placenta out of the uterus or permitting the patient to bleed while awaiting spontaneous separation and expulsion.

Here are summaries of modern thought, together with original CLINICAL MEDICINE illustrations showing the technic of manual placental removal.

The fingers of the internal hand feel for the line of cleavage between the soft placenta and the firmer uterine wall.

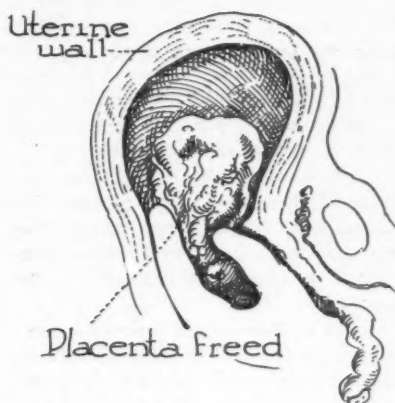
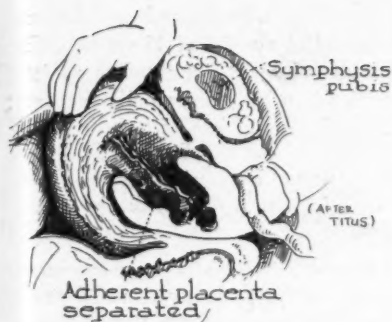


1. Sponge off the labia with an antiseptic solution. The labia should be separated widely, as the gloved hand is introduced, to avoid contaminating the fingers. The hand is kept well away from the anus.



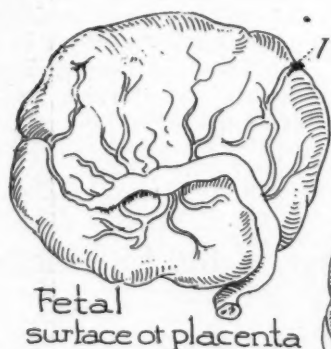
2. The gloved hand is introduced in the shape of a cone (Beck) and counterpressure is made with the external hand. The cord followed to the placenta.

PICTORIAL SECTION

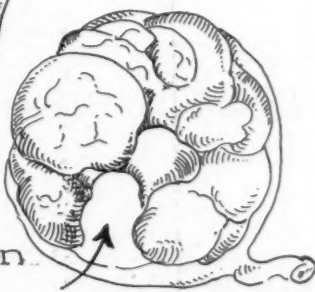


3. The placenta is separated by a slicing (Titus) or a side-to-side motion of the fingers (Beck), after penetration of the membranes at the edge of the placenta and finding the cleavage plane between the uterus and the placenta.

4. The entire placenta is separated from the uterine wall before any of it is removed.



Cotyledon absent



5. Another indication for manual removal: On inspection of the placenta, the maternal surface should present a composite and complete picture. The cotyledons (cup-shaped subdivisions of the uterine surface of the placenta) should fit snugly against one another and the margin should be smoothly beveled off throughout the circumference.

On the fetal surface, the large branches of the umbilical vessels should be traceable to intact segment of the placental tissue. A large vessel torn off at the margin of the placenta or one which leads beyond the margin to a raw area on the membranes, indicates that a placenta succenturia has been detached and retained in the uterine cavity.—Adapted from NORRIS WAUX, M.D., and M. A. CASTALLO, M.D., in *"The Mechanic. of Obstetrics"* (F. A. Davis Company).

One must remember that the uterus is not as firm as it is in the non-pregnant state, and must separate gently.

In very rare instances, the placenta will have invaded the uterine wall (placenta accreta) and cannot be separated from it, necessitating hysterectomy.

Indications for Removal of the Placenta: 1. Retention of the placenta for 45 minutes, despite gentle pressure on the uterine fundus and Crede expression. 2. In blood loss, if steady or profuse.

Technic: Sutures are inserted in perineum, but not tied, while awaiting routine separation of placenta. If gentle manipulation does not result in placental separation and expulsion, the patient is repainted with antiseptic and redraped, the gown and gloves are changed and the placenta is carefully palpated to determine the cleavage plane, to rule out placenta accreta. (adherent placenta). Separation of the placenta from the uterine wall is carried out with the fingers.

Results: No deaths and no infections occurred in a series of 45 patients. The patients were not permitted to go into shock due to rough external attempts at expression or to loss of blood.—C. W. SEWELL, M.D., and DONALD COULTON, M.D., Boston University School of Medicine) in *Am. J. Obstet. & Gyn.*, Oct., 1946.

It is relatively safe to remove membranes or fragments of placental tissue from the uterus shortly after delivery, but dangerous if delayed until after the first postpartum day. Bacterial cultures taken from the uterus show an increasing bacterial invasion. In the first hour, only 1 culture in 10 was positive; at the end of the first day, 9 out of 10 were positive and all consecutive cultures (40 in all) were positive during the second to fifth days.—FRANK E. WHITACRE, M.D. (University of Tennessee Medical College, Memphis) in *Am. J. of Ob. & Gyn.*, Dec. 1946.

The Lymphatic Drainage of the Umbilicus

Regarding the lymphatic drainage of the umbilicus, it is recounted that the prince of surgical anatomists, Sir Frederick Treves, anxious to escape axillary lymphadenitis following vaccination, and believing that the umbilicus was relatively bereft of lymphatics, directed his medical attendant to scarify and apply the lymph to the skin in the immediate vicinity of his umbilicus. Two days later he was unable to attend the hospital, and it transpired that he was incapacitated with tender swellings of both axillae and both groins.—HAMILTON BAILEY, F.R.C.S., London, England (86 Brook Street).

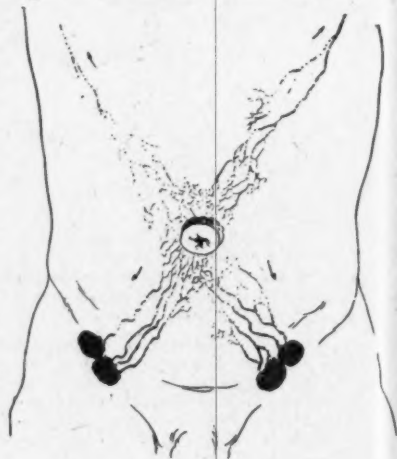


Fig. 1. The lymphatic drainage of the umbilicus. →

Sterilization in the Female

The Madlener technic of crushing and ligating a loop of the fallopian tube has been used by many authorities since it was announced in 1919. Dr. J. P. Greenhill of Chicago Lying-In Hospital writes to *Clinical Medicine* that his results have been good with this method.

Frank E. Whitacre, University of Tennessee Medical College, Memphis writes in the December 1946 *American Journal of Obstetrics and Gynecology* that the technic here illustrated has proven effective. During the immediate postpartum period, the uterus is an abdominal organ and the tubes may be easily reached.

Within one or two hours after delivery, a short incision (1½ inches in length) is made just below the umbilicus at the level of the fundus of the uterus, through the skin, muscles and peritoneum. The index finger is inserted over the round ligament, which is pulled upon to move or rotate the uterus until the fallopian tube presents in the incision. The tube is grasped with an Allis or Babcock forceps, and lifted upward. The knuckled tube, including a small portion of the mesosalpinx, is clamped across with a crushing instrument. The tube is crushed across to paper thickness but without breaking the serosa. After ½ minute,

the crushed loop is ligated with double heavy silk and the procedure repeated on the opposite side. The incision is closed in layers. (see Fig. 1 and 2).

Edward Allen of Chicago feels that the loop of tube should be removed (Fig. 3.).

Whiteacre's studies have shown that the uterus becomes contaminated with pathogenic organisms during the postpartum period, and that if any procedure is to be done on the pregnant uterus, such as removal of placental fragments or membranes or ligating the tubes, it should be carried out within a few hours after delivery or else postponed for several weeks.

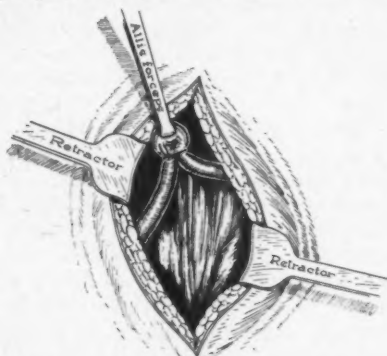


Fig. 2

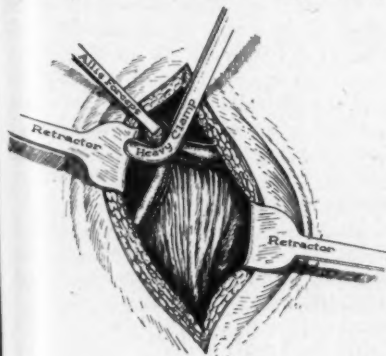


Fig. 1

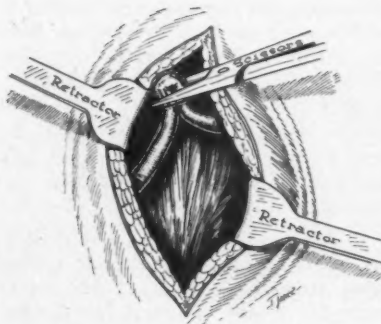


Fig. 3

Early Detection and Treatment of Surgical Shock During Minor Surgery

By FRANK D. STANTON, M.D., *Boston, Massachusetts*

SHOCK is more common than is generally supposed. What is commonly described as shock seems more like collapse due to shock.

Every day our crew handles a number of cases of rectal surgery, including hemorrhoidectomy, fistulectomy, surgical correction of prolapse, surgical correction of post-surgical or congenital stricture of the anus, and the like. These are treated surgically in our Clinic under local anesthesia and the patient goes home after the operation. Some of these patients, while being treated, or operated upon, develop early symptoms of shock.

When I first took up proctology the things that we now recognize as early shock were identified as "nervous reactions"—or "reactions to the anesthetic." The "nervous reactions" are, of course, part of the picture of shock. The "reaction to the anesthetic" so rarely is seen by us that we know little about it.

If the patient becomes pale; if his ears, which were normally pink, become putty colored; if the patient belches gas; if he asks for a drink of water; if he perspires copiously; if his skin is cold and clammy; if he says he feels nauseated; if he "thinks he is going to vomit"; if he starts to tremble; if after having been a good patient for several minutes, he becomes apprehensive, hypersensitive and complains you are hurting him, he is developing the early signs of shock.

In our Clinic we have a liberal supply of emesis basins. There was a time when these basins were used almost every day. Today, if one of these basins is used, we consider that somebody has

failed to observe the patient. The patient would not have vomited if he had been discovered as being nauseated or disturbed before he vomited. If the patient vomits, it is probably a symptom of shock, and somebody or everybody failed to recognize what they should have recognized minutes before.

Causes of Shock

We sometimes can be fooled by the patient who is trying to be "game." Such a patient will sometimes put up with a great deal only to be found later to be in shock. The patient who is being hurt, whether he complains about it or not, is having pain and since *pain is the first and most common cause of shock*, he is likely to go into shock whether he is a "game guy" or not.

Fear is the other common cause of shock. The patient who has laid awake all night worrying about "going under the knife," is likely to go into shock very early in his first experience with rectal treatment and this is due to fear. He does not wait to be hurt.

For all practical purposes we consider shock a condition of anoxia, the deficiency of oxygen in the capillary bed. Being clinicians and having neither the training, nor the experience, to make a scientific study of the subject we are obliged to accept what has been written by those who have carried out research on the subject.

Much that has been written on shock deals with shock due to hemorrhage, with which we have had little experience.

Treatment

The point, as I understand some of

what I read, is that the patient is breathing all right and he is getting air. He needs oxygen in the capillary bed because the capillaries have "collapsed." The fact that patients are so promptly relieved when given oxygen seems a clear demonstration that *there is a difference between the patient who is breathing air and the one who is breathing oxygen*. There is also the matter of shallow breathing. The rate of breathing may be normal, but the character of breathing may be shallow. This, however, is not often seen in the picture which we see in practice.

Shock, as we encounter it, is treated with oxygen. Our equipment consists of medium size oxygen tanks equipped with masks, and dials to indicate the amount of oxygen which is in the tank and the amount of oxygen which is being given the patient. In most instances the patient holds the mask himself. Sometimes we strap it on. We seldom find it necessary to employ rebreathing. The important thing is to discover the condition at the earliest moment and to promptly administer oxygen. In cases where indicated, Coramine is given in addition to oxygen.

Results

When oxygen is administered early, the patient is usually immediately relieved. After a few breaths he says that he feels better. In less than five minutes he usually asks to have the mask taken off. His request is complied with, the treatment being repeated later if necessary. We find it best to administer oxygen as long as the patient will take it. There is really no limit, within reason, to the length of time when it may be given. We would like him to keep on breathing some oxygen during the entire period that he is being treated.

The patient who says he is going to vomit will need to be given the oxygen immediately, otherwise, he will vomit before the oxygen mask is applied. Sometimes he will vomit into the mask and this also demonstrates that the mask was not on soon enough. Whoever is responsible for the delay will be much impressed by this incident.

Many doctors in many parts of the country who have studied with us at the Clinic can testify as to the efficacy of this method of early recognition and treatment of shock.

419 Boylston Street

Bacillary Dysentery

The early diagnosis of bacillary dysentery can be made rapidly and accurately by proctosigmoidoscopy and such examination should be made promptly in cases of diarrhea and abdominal cramps with or without associated fever since immediate diagnosis permits prompt specific therapy, rapid symptomatic relief, accelerated healing, brief hospitalization and reduced mortality. Pathological changes in the mucosa are visible and diagnostic within two to twenty four hours of onset of symptoms. The advantage of early therapy is that the mucosal changes are most readily reversed. If

treatment is delayed until stool cultures are reported positive, ulcerative lesions require a much longer period to disappear and may become very resistant to treatment. A few patients may exhibit lesions comparable to those of chronic ulcerative colitis. *Effective and early treatment with sulphadiazine* leads to subjective improvement, but symptomatic relief is not paralleled by objective healing or mucosal ulcers which may require days or even weeks of therapy to heal. Healing does occur more rapidly during chemotherapy, especially with the use of sulphadiazine: SMITH, J.A.M.A., Jan. 5, 1946.

X-Ray Demonstration of Adenoids and Other Lymphoid Tissue

Lymphoid tissue in the nasopharynx may cause recurrent otitis media and sinusitis, nasal obstruction and deafness. Such tissue may still be present after the conventional type of tonsillectomy and adenoidectomy. Lateral x-rays may be taken of an infant or child at any age without distressing the youngster and with demonstration of the presence or absence of lymphoid tissue.

Harry L. Weitz, radiologist of Mun-

son Hospital, Traverse City, Michigan presents roentgenograms illustrating lymphoid masses in the nasopharynx.

"Children referred from our pediatric clinic routinely receive lateral studies of the nasopharynx, particularly if there is any question of sinusitis and bronchial disease . . . Where possible, we try to check adenoidectomies post-operatively . . . We rarely demonstrate any lymphoid or adenoid masses in infants under one year of age."



Fig. 1. Illustrates the normal nasopharynx in the infant.



Fig. 2. Illustrates the normal nasopharynx in a child.



Fig. 3. A lobulated adenoidal mass.



Fig. 4. Enlarged adenoids.



Fig. 5. Almost complete occlusion of the nasopharynx.



Fig. 6. Congenital narrowing of the posterior nose (atresia of choana) demonstrated with lipiodol injection.

EDITORIALS

Be Definite!

IT is one of the drawbacks of scientific training that attends to make one cautious in pronouncing judgment. This is a good scientific trait but a poor one from the standpoint of impressing patients, or persuading to do what you think is best.

Be scientific with yourself, but be definite with the patient.

The patient wishes you to use every possible means of arriving at a diagnosis and then going ahead. If he needs an operation, he does not wish to know all the technical terms . . . all he wishes to know is that the operation is necessary and that it will be performed by someone who is fully competent to deal with any condition that may be found.

Physicians who express doubts, uncertainties, hesitations, conflicts in physical or laboratory findings tend to confuse the patient. The patient does not wish to have the burden of decision, except in certain cases where very serious steps must be taken, or where unduly expensive tests should be carried out. The patient comes to the physician for full advice and directions as to what is necessary. The burden of making the whole decision should not fall on the patient.

There are a few very well educated persons with a scientific background who wish to know everything about their particular case, what is to be done, and why. These persons are in the great minority. Do not confuse them with the individual who reads a few health columns or books and then thinks that

he or she is an authority on diagnosis and treatment.

Do not let the patient force you into making a definite decision without adequate basis. If you feel that another examination is necessary at a later date, a chest x-ray, a blood count, blood-sugar determination, or any other step before you can be definite, state flatly that this must be carried out first. It is a surprising thing that the patient who is pleased and gratified when a chest x-ray or some other diagnostic step is taken, would have objected or wished to postpone this procedure if asked in advance. Because of some quirk in human nature, the patient often states that he gets a very thorough examination and is proud of the fact.

Experienced practitioners never apologize to the patient. There are many rare and uncommon conditions in which the diagnosis is difficult at best. The physician should do the best that he can, assuming that he is constantly studying enough so that his best is as good as anyone else in his line of practice and not let himself be hurried into any decision or operation without full consideration and consultation, if necessary.

Most people do not realize the difficulties that lay in the path of a correct diagnosis of diseases of the internal organs. For this reason, it is almost impossible to explain all the various steps in making a proper diagnosis, nor do most of them wish such an explanation. They wish someone to be definite with them as to the needs for the examination or the operation.



CLINICAL NOTES AND ABSTRACTS

Idiopathic Thrombocytopenic Purpura (Werlhof's Disease)

Historical

First described by Werlhof, 1775. Purpuras divided into thrombocytopenic and non-thrombocytopenic by Denys, 1887. Prolonged clot retraction noted by Hayem, 1896. Prolonged bleeding time, but normal clotting time noted by Duke, 1911. First successful splenectomy for thrombocytopenic purpura by Schloffer, 1916.

Etiology

More common in women than in men. Usually appears during or before adolescence. Two basic theories of etiology: (a) Defective platelet formation in bone marrow, (b) Increased platelet destruction by spleen: postulated myelotoxic substance "thrombocytopen." Bleeding due to qualitative and quantitative defect in platelets.

Normal Platelets

Spheroid or ovoid granular bodies, 2-4 micra in diameter, derived from the megakaryocytes of bone marrow. Normally 200,000-450,000 per cu. mm. blood. Average life 3-5 days.

Symptoms and Signs

Symptoms: 1. Bleeding: subcutaneous, gingival, nasal, urinary tract, intracranial and elsewhere.
2. Secondary anemia with symptoms thereof.
3. Duration of attack: several weeks to months.
4. Recurrences: common and frequent.
Signs: 1. Petechiae, purpuras and ecchymoses.
2. Liver and spleen rarely palpable.
3. Secondary infections common, esp. Vincent's gingivitis.

Laboratory

Five cardinal points in diagnosis:

1. Marked reduction in platelets.
2. Prolonged bleeding time.

3. Delayed clot retraction.
4. Normal clotting time.
5. Positive capillary resistance test.

Differential Diagnosis

1. Purpuras With Quantitative Platelet Deficiency:

- A. Idiopathic thrombocytopenic purpura (Werlhof's Disease).
- B. Symptomatic Thrombocytopenic Purpura.

1. Aplastic anemia, pernicious anemia, acute and chronic leukemia, agranulocytosis, Banti's disease, Gaucher's disease, bone marrow metastases (carcinoma, Hodgkin's disease).
2. Poisoning with benzol, arsenicals, radium, and others.
3. Overdose of X-ray.

2. Purpuras Without Blood Platelet Deficiency:

- A. Simple Symptomatic Purpuras.

1. Infectious: typhus, typhoid, meningococcus infection, endocarditis, smallpox, scarlet fever, syphilis, tuberculosis, and so on.
2. Toxic: histamine, copaiba, iodides, quinine, mercury, arsenic etc.
3. Miscellaneous: nephritis, arteriosclerosis, senility, avitaminoses (esp. vitamins C, P and K), scurvy, vasomotor disturbances, passive congestion, freezing, convulsions, constrictions, etc. B. Anaphylactoid Purpuras (Glanzman): Schönlein's purpura, Henoch's purpura, Osler's erythema group, allergies.

- C. Purpura Fulminans.

3. Hemorrhagic Diseases.

- A. With Qualitative Blood Platelet Deficiency:
 1. Hemophilia.
 2. Hereditary Thrombasthenia.

B. With Fibrinogen Deficiency:

1. Pseudohemophilia hepatica, phosphorus or chloroform poisoning, acute yellow atrophy.

2. Hemorrhagic disease of the newborn.

C. Jaundice (obstructive, cirrhosis, and so on).**D. (With Capillary Pathology:**

1. Hereditary hemorrhagic telangiectasia.

2. Hemorrhagic capillary toxicosis (Frank).

E. With Hormone Deficiency:

1. David's Disease.

F. Miscellaneous: Familial Epistaxis, von Willerbrand's thrombopathy, Polycythemia versa, Lupus erythematosus.**Methods of Laboratory Procedure.**

Platelet Count: Using oxalated blood and Toisson's fluid, prepare counting chamber as for red cell count. Stand 10 minutes and count under subdued light. Count platelets in entire central ruled area and multiply by 2000. Normal range: 200,000-450,000.

Bleeding Time: Make finger or ear puncture sufficiently deep to allow free bleeding. Blot with filter paper every 30 seconds until bleeding stops. Normal range: 1-3 minutes.

Clotting Time: (Method of Lee & White) Transfer quickly 2 cc. venous blood to 8 mm. test tube. Tilt tube at intervals of 1 minute. Clotting is complete when tube can be inverted. Normal range: 5-10 minutes.

Clot Retraction: 2 cc. venous blood in small tube as in determining clotting time. Observe for time when serum appears to separate out. Normally retraction appears in 1-6 hours.

Capillary Resistance: (Rumpel-Leede Tourniquet Test) Apply blood pressure cuff in usual manner and maintain at diastolic pressure for 5 minutes. A shower of petechiae on the forearm indicates decreased capillary resistance. An occasional petechia may be normal.

Treatment

Acute Phase: Rest in bed; high protein, high vitamin, anti-anemic diet (avoid foods to which patient may be allergic); multiple small (250-500cc) transfusions of fresh blood; mocassin venom 0.4-1.0 cc. 1/3000 subcutaneously twice weekly; irradiation of spleen (Mettier); citrus

pectin (Isaacs) 3.0-9.0 grams daily; calcium, vitamin C, vitamin K and parathyroid extracts.

Interval: Splenectomy indicated in presence of normal or hyperplastic bone marrow, contraindicated in hypoplastic marrow (aplastic anemia, leukemia), absence of megakaryocytes in marrow and following drug ingestion (possible symptomatic thrombocytopenia). If successful, platelets will rise to normal in peripheral blood within 24-48 hours; accessory spleen Mortality of 5-13%. Pre-failure indicates erroneous diagnosis, hypoplastic bone marrow, or presence of accessory spleen. Mortality of 5-13%. Precede operation with multiple transfusions and by study of sternal marrow.—CHARLES D. MARPLE, M.D.

Sterility

Two endocrine products have therapeutic influence in sterility. 1. Thyroid extract for its trophic influence on the ovaries and general metabolism, and 2. Estrogens for their activating effect upon the fallopian tubes and possibly also on the cervical secretion.

Conservative surgery, such as removal of the cyst bearing portions of the ovaries has brought about regulation of the menstrual cycle in puberty bleeding and in functional menometrorrhagia of young women. This procedure is also capable of restoring menstruation which is habitually delayed for longer or short intervals.

Fractional x-ray irradiation of the ovaries in many instances leads to normal menstrual cycles and increases the possibility of impregnation.—I. C. RUBIN, M.D. in *New York S. J. M.*, Dec. 1, 1946.

The End Results of Untreated Syphilis

Of 380 syphilitic patients examined post-mortem at New Haven Hospital (1917-1941), 198 (52 percent) had never received treatment. Anatomic lesions of syphilis were found in 40 percent of these untreated persons, but only 23 percent of the group died primarily as a result of syphilis. No anatomic lesions of syphilis were found in 60 percent of these patients. — P. D. ROSAHL, *J. Ven. Dis. Info.*, 27, 12, 293, December 1946.

Cancer of the Larynx

Early accurate diagnosis of laryngeal cancer with suitable therapy has converted a previously incurable condition into one with a mortality rate of approximately 15%. *Hoarseness is the earliest and most persistent symptom of carcinoma of the vocal cords* and any patient with hoarseness persisting as long as two weeks is entitled to an examination of the larynx. Pain radiating to the ear, wheezy cough, difficulty in breathing, pain on swallowing, fetid breath and persistent pain are all late symptoms. Carcinoma of the vocal cords (intrinsic cancer) has an early presenting symptom (hoarseness), but the symptoms of extrinsic cancer of the larynx are all late. Cancer of the contiguous and surrounding structures have no common characteristic symptom except that of late appearance. Fortunately, extrinsic cancers are so rare that "cancer of the larynx" nearly always means cancer of the vocal cords.

Carcinoma of the larynx may appear as an ulcer, as a warty projection, or as a cauliflower mass on one or both vocal cords. A biopsy is necessary to make a definite differential diagnosis between cancer, syphilis, tuberculosis and pachydermia. This is readily done with direct laryngoscopy and punch forceps under local anesthesia.

The rule, expressed by Broder's classification, that the more malignant the cancer, the more amenable it is to irradiation and the less to surgery, applies to cancer of the larynx. Thus, while surgical treatment is indicated in cancers of groups 1, 2 and 3, group 4 carcinomas should be irradiated. While papilloma of childhood is a benign condition, producing serious symptoms only when it becomes sufficiently large to obstruct, papilloma of the adult is potentially malignant and must be treated with respect.

A patient with laryngeal carcinoma who is not examined, or is examined inadequately during the early stages, will require a mutilating operation or be dead (or both) within two years. The general practitioner must, as a rule, make the early diagnosis and refer to a laryngoscopist for adequate therapy.—C. C. Cody, M.D., in *Texas State J. Med.*

Cold Agglutination Test in Atypical Pneumonias

The demonstration of cold agglutinins in increased titer in the blood of patients suffering from primary atypical pneumonia is a valuable laboratory procedure in the recognition and identification of this disease. The test is performed by adding 0.10 cc. of a 2% suspension of washed, group O human red blood cells to 1 cc of serial dilution of the patient's serum, allowing the mixtures to stand over night at 0° centigrade and reading immediately and after allowing the mixture to stand at room temperature for several hours.

Horstmann and Tatlock tested the sera of 43 patients with primary atypical pneumonia in whom the diagnosis had been made by the usual physical and laboratory examinations. In 27 of these 43 cases, the cold agglutination test was positive. The results indicated that in many cases there was a rise in the titer of the cold agglutinins one week after the onset of symptoms and that this elevated titer might persist for several weeks after recovery from the disease. No positive tests were obtained before the 8th day of the disease. There was no clear cut correlation between the height of the titer and the severity of the illness. Cold agglutination tests were negative in each of 135 patients suffering from conditions other than primary atypical pneumonia.

McNeil followed 15 patients with primary atypical pneumonia, identified by the usual diagnostic criteria, with cold agglutination tests every 4th day. A positive reaction was obtained in 6 to 8 days, the maximum titer was reached between the 10th and 14th day, and there was a gradual decrease in the titer during convalescence. The highest titers were observed during the most serious stage of the disease and it was during this period that one patient became critically ill and another died, both of pulmonary edema.

The test is not entirely specific but is a practical one in this part of the world. It has been described consistently in African trypanosomiasis. The test is often positive in infectious mononucleosis.—*Resumé* by Charles D. Marple, M.D.

Thiouracil Treatment of Hyperthyroidism

Thiouracil acts specifically by preventing the utilization of iodine in the formation of the thyroid hormone. A constant feature of its use in experimental animals is hyperplasia of the thyroid gland, apparently a compensatory hypertrophy related to the functional deficiency and brought about by the thyrotropic hormone of the anterior pituitary. In man, enlargement of the gland is not seen, but comparable histological changes do occur. A detailed review of the mechanism of action, pharmacology and therapeutic action of thiouracil has been published by Riker and Wescoe (*Amer-Journ. Med. Sci.*, November 1945).

Thiouracil is effective in the treatment of nearly all cases of hyperthyroidism, the failures in several series of cases reported being less than 2 percent. During therapy symptoms are relieved, the basal metabolic rate returns toward normal and the associated biochemical alterations (creatin tolerance, serum cholesterol level, nitrogen, calcium and phosphorus balances) improve. Therapeutic remission persists as long as therapy is continued, but, except for a small percentage of patients who remain well for years, most patients relapse even after 6 months or more of therapy. Despite the preoperative disadvantage that thiouracil increases the vascularity of the thyroid gland, it is considered superior to iodine in many clinics.

Thiouracil is a potentially dangerous drug which may produce granulocytopenia, leukopenia, drug fever, dermatitis, and less commonly, jaundice, purpura and anemia. Only granulocytopenia has hitherto proven serious. Granulocytopenia has occurred in all extensive series of cases reported, most commonly occurring during the first 4 weeks of therapy, but appearing up to 8 months of therapy or longer. The incidence is apparently unrelated to the dose of the drug, but seems more likely to occur when treatment is resumed after a lapse. This frequency and seriousness of agranulocytosis demands caution in therapeutic use of thiouracil. The recent report of the Council of Pharmacy and Chemistry of the American Medical Association (*J.A.M.A.*, Feb. 9, 1946), reporting an

incidence of all types of reactions of 13 percent and of agranulocytosis, 2.5 percent with a case mortality rate of 14 percent, advises that thiouracil be employed only for preoperative treatment and for those cases in whom operation is contraindicated. It is hoped that the drug may replace surgery in selected groups of patients and that related anti-thyroid drugs with less toxic effects on the bone marrow may be revealed.—*Edit., New York State J. Med.*, Nov. 15, 1946.

Streptomycin

Streptomycin has not given the good results at first expected from it. Although theoretically specific for typhoid and brucellosis, actual experience has been discouraging. It is of value in the treatment of tularemia, Pfeifer's bacilli infection and certain infections of the urinary tract, and will clear the bowel temporarily of streptomycin-sensitive bacteria. Its effect on tuberculosis, plague, and other diseases are not advanced enough to draw conclusions. Various strains of bacteria, even those of a single species vary greatly in their resistance to streptomycin, and in some instances sensitive strains develop resistance with great rapidity.—HOBART M. REIMANN, M.D., in *J.A.M.A.*, Dec 21, 1946.

Folic Acid Treatment of Pernicious Anemia

In the treatment of macrocytic anemias with a megaloblastic bone marrow; such as pernicious anemia, sprue, nutritional anemia, and the macrocytic anemia of pregnancy, of infancy and following total gastrectomy, the oral or parenteral administration of 10 to 20 mg. daily of folic acid induces a prompt rise in reticulocytes of the circulating blood, a standard increase in the red blood cell count and hemoglobin and all the dramatic clinical manifestations of recovery observed in such patients when potent liver extract is given. The maintenance dose is unknown but it may be as small as 20 mg. weekly.

Mode of action: It accelerates the development of the immature red blood cells in the bone marrow.—CYRUS C. STURGIS in *J.A.M.A.*, December 21, 1946.

The Vaginal Smear and Cancer of the Uterus

The diagnosis of cancer of the cervix and of cancer of the endometrium can be made with a high percentage of accuracy by the vaginal smear method, (Papanicolaou, confirmed by Meigs). Since the method depends upon the observation of individual malignant cells desquamated from the tumor into the vaginal secretion, the diagnosis can be missed if the tumor does not shed tumor cells. On the other hand, early cases of cancer in which the small size of the lesion, or its location would make its identification by biopsy unlikely can be diagnosed by this method. The method is a valuable screening process.

A small glass tube is placed in the vagina, the attached bulb is compressed, the bulb is then released and the secretion removed by suction. The secretion is blown on a glass slide, spread out in a good film and immediately fixed in a solution of equal parts of ether and 95% alcohol. Placing immediately into the fixative is important, but the slide may remain there for 2-3 weeks before deteriorating. The directions for staining and for interpreting individual cells are thoroughly described in a monograph (Diagnosis of Uterine Cancer by Vaginal Smear, Commonwealth Fund, N.Y., 1943) by Papanicolaou and Traut.

There is no doubt of the value of the vaginal smear in the diagnosis of cancer of the cervix and endometrium and in certain early cases, the method is more accurate than that of biopsy. If a cervix is generally suspicious in appearance, it is difficult to choose the likeliest point for biopsy and even multiple biopsies may fail to disclose malignant changes. It is in this type of case that diagnosis is so important since early treatment of such cancers leads to complete cure. The author believes that a positive vaginal smear is an indication, not for hysterectomy, but for biopsies to confirm the diagnosis and emphasizes that the procedure is not one for casual office examination, but must be interpreted by persons trained in the smear method of diagnosis and cytological technique. — J. V. MEIGS, M.D., in *J.A.M.A.*, Jan. 1, 1947.

Thrombin for Hemophilic Bleeding

The application of powdered sulfanilamide and thrombin checks oozing in hemophilia.—C. S. DAVIDSON, M.D., in *J.A.M.A.*, June 30, 1945.

(Thrombin is obtainable commercially. It is being used to attach skin grafts without sutures, to unite lacerations, check nose bleed and tonsillectomy bleeding. Watch *CLINICAL MEDICINE* for a graduate course on practical uses of blood products.—Ed.)

Streptomycin in Pediatrics

Streptomycin is indicated in the following infections:

A. Streptomycin alone in:

1. H. Influenzae meningitis of any type, mild or average severity,
2. Tularemia,
3. Proteus or pseudomonas infections of urinary tract, blood or meninges,
4. Severe typhoid fever or brucellosis,
5. Urinary tract infections with colon and aerobacter groups if sulphonamides fail.

B. Streptomycin plus Sulphadiazine in:

1. Infections of blood or meninges with any gram-negative rod originating from the intestinal tract,
2. Severe H. Influenzae meningitis of types other than type b.

C. Streptomycin, Sulphadiazine and rabbit antiserum in:

1. Severe type b Hemophilus influenzae meningitis.

D. Streptomycin may prove effective in bacillary dysentery, some of the Salmonella types, K. pneumoniae and H. pertussis infections, but clinical trial is inadequate for evaluation.

—H. E. ALEXANDER, *J. Pediat.*, Aug. 1946.

Rheumatoid Arthritis

The treatment of rheumatoid arthritis should include removal of obvious areas of infection, a program of rest, and the inflamed joints should not be traumatized by occupation and recreation. The use of physical therapy daily in their own home, supplemented by professional physical therapy should relieve pain and muscle spasms with, perhaps, vaccine therapy. Gold therapy may be employed unless the patient is sensitive to it.—PHILIP F. HENCH, M.D., *J.A.M.A.*

Growth During Childhood

Growth is not the result of a single factor, but of inheritance (tall people beget tall offspring), food intake and utilization, and of hormonal influences. The average height of our population is increasing as has been demonstrated by statistics obtained by comparing the inductees of World Wars I and II.

In dealing with children of definitely retarded growth, both genetic and hormonal factors must be considered. The truly hypothyroid group of children with retarded growth respond most readily to treatment. Use of the various preparations containing anterior pituitary growth hormone has been discouraging.

"Spurts of growth" in many children who level off before maturity result in normally tall individuals. It is of some concern to students of growth problems that attempts are being made by certain physicians to limit statural growth by the use of the very potent hormone preparations now available (steroids, estrogens, androgens and the inert "whole ovarian substance"). *There is no convincing evidence to show that the use of these endocrine products has modified growth in any degree*, while it is reasonable to suppose that the use of potent substances over relatively long periods of time will profoundly influence many metabolic processes within the body, many of these effects being, in all probability, undesirable (e.g., effects on the genitals). "The undisciplined use of potent drugs to gain illusory therapeutic ends, advances neither science nor good medicine."—Edit., *New York State J. Med.*, Nov. 15, 1946.

Empyema

Potential empyemas should be treated with large doses of penicillin during their incipient period of development.

Patients who have been "cured" of their empyemas by penicillin should be carefully watched over at least a 2 weeks period for a possible recurrence.

Any toxic or nontoxic turbid pleural effusion containing polymorphonuclear cells following a pyogenic infection treated with penicillin should be surgically drained, even though the pus is sterile on culture.—H. POZFE, M.D., in *J.A.M.A.*, October 6, 1945.

Treatment of Gas and Belching

Sodium bicarbonate, in doses of 1 to 4 Gm. (15 to 60 gr.) well diluted with water, neutralizes gastric acidity, with the production of carbon dioxide, which is carminative. Carbonated water (water highly charged with carbonic acid) relieves gastric distress and flatulence; "soda," seltzer water or vichy water are examples. Several drops of oil of peppermint, U.S.P., on sugar, or in water, also acts as a carminative, by lessening the tonus of the cardiac sphincter, thus allowing escape of gas.—M. G. MULINOS, M.D., in "Pharmacology" (Oxford).

Cartilaginous Bone Tumors

The principal problem of cartilaginous tumors of bone is distinguishing benign from malignant forms. There are three types of cartilaginous neoplasms: 1) Chondromas, readily cured by conservative surgery, 2) Chondrosarcomas composed of cartilage of myxomatous tissue, bulky, slow-growing, very late in metastasizing and persistent in tendency to local recurrence, and 3) Chondrosarcomas containing anaplastic spindle-shaped and pleomorphic cells, early metastasizing and simulating true osteogenic sarcoma.—G. B. MILES, M.D., in *Industrial Med.*, Oct. 1946.

Prevention of Motion Sickness

The results of various workers studying airsickness and seasickness indicate that hyoscine alone or in combination with hyoscyamine or a barbiturate affords a considerable degree of protection against motion sickness of various sorts. Medication can be continued for a period of a fortnight without untoward effects, provided that excessive doses are not ingested. The dose of hyoscine hitherto recommended has been 0.6 mgms. not more often than every four hours.

Animal experiments reveal that the vestibular portions of the cerebellar cortex are involved in the generation of motion sickness, while it has long been known that inactivation of the labyrinths in both animals and in man renders them completely immune to motion sickness.—P. BARD, M.D., in *Bull. Johns Hopkins Hosp.*, Nov. 1946.

Treatment of Infected Sebaceous Cysts

Complete removal of the wall of a sebaceous cyst is necessary to prevent recurrence. The removal of the entire wall is a tedious, difficult procedure if infection has taken place. This simple technic may also be used in non-infected cases.

Technic: 1. Cleanse the skin, 2. make a small stab incision with a sharp point-

ed scalpel, 3. empty the cyst, 4. place a small piece of silver nitrate (approximately 0.1 Gm.) into the cyst cavity, through the incision, and 5. at the end of 24 hours, the blackened cyst wall is easily recognized and removed. (See original *Clinical Medicine* illustrations.)
—JACK FISHMAN, LT. CMDR., U.S.N.R.,
Original description in *Naval Medical Bulletin*, June 1946.

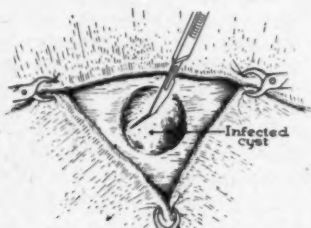


Fig. 1 Incision into cyst

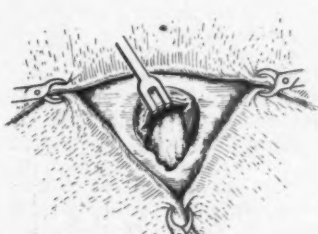


Fig. 2 Contents are evacuated



Fig. 3 Small solid piece of silver nitrate is placed in cyst cavity (after Fishman)

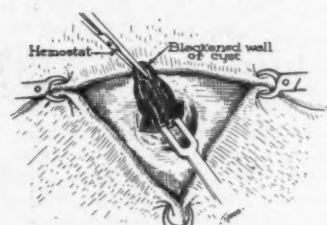


Fig. 4 Removal of discolored cyst wall

Intravenous Morphine for Coronary Occlusion

The intravenous administration of morphine in doses of 1/8 to 1/6 grain (8.1 to 10.8 mg.) for pain in coronary occlusion is of great value. The protracted pain is of major importance in causing the state of shock, which in itself may extend the zone of damage of the infarcted area. More attention to the treat-

ment of shock by the usual method may be of additional value.—WILLIAM J. KERR, M. D., in *J.A.M.A.*, Dec. 21, 1946.

(The dosage of intravenous morphine may be regulated according to the relief of pain; doses of 1/4 grain or greater may be given very slowly intravenously, until the patient states that the pain is relieved.—Ed.)



DIAGNOSTIC POINTERS

Cancer Misdiagnoses

Poor medical advice given by many physicians includes: 1. Failure of the physicians to appreciate the significance of persistent vague indigestion in a patient over 40 years of age, and hence failing to advise careful x-ray examination; 2. failure to recommend x-ray examination, proctoscopy and rectal examination in a patient complaining of a persistent change in bowel habit, 3. failure to perform a rectal examination, 4. failure to investigate the cause of blood in the stools and 5. failure to realize the malignant potentialities of gastric ulcer. — EDWARD OTTENHEIMER, M.D. in *Hawaii M.J.*, July-Aug. 1945.

Rheumatoid Arthritis: Unusual Types

Prodromal symptoms of fatigability, anorexia, weight loss, and numbness and tingling in the extremities, with or without vague muscle and joint aching, precede the joint manifestations for years. Anemia, lymphadenopathy, splenomegaly, subcutaneous nodules, iritis, pleurisy, pericarditis and myocarditis may appear. Typical rheumatoid arthritis typically runs an intermittent course with periods of complete remission.—M. ROPES, M.D., in *New England J. Med.*, Nov. 15, 1945.

Apoplexy vs. Subarachnoid Hemorrhage

Subarachnoid hemorrhage should be suspected if abrupt onset, severe headache, combined irritability and drowsiness varying from delirium to coma, and much free blood in the spinal fluid, are found. The severe symptoms arise from intense meningeal irritation.—J. ST. C. ELKINGTON, M.D., in *Practitioner*, (Eng.), Feb., 1946.

Hypoglycemic Fatigue

Fatigue due to a low blood sugar level may be suspected if the patient states that the fatigue occurs in the morning before breakfast, 2 to 4 hours after meals and always occurs if a meal is missed. Dizziness, heartburn, pain in chest, weakness and dyspnea may appear, and are relieved regularly by food within 20 minutes or less.—S. C. KARAN, M.D., in *J.A.M.A.*, Mar. 2, 1946.

The Sprue Rectum

There is spasm of the rectal sphincter due to local irritation of the rectal mucosa by frequent and acid stools. The obliteration of the normal mucosal folds is even more diagnostic. The pain experienced by the patient is much more than that produced in the normal patient. The mucosal wall is thin, smooth, warm and more tender than usual.—C. K. PRATT, M.D., in *Puerto Rico J. Public Health*, Sept. 1945.

(Such a type of rectum is encountered in vitamin B Complex deficiency patients, even in the temperate zone.—Ed.)

Cystic Disease of Breast

Cystic disease of the breast with epithelial hyperplasia is apparently not a precancerous condition and does not require radical breast amputation.—A. P. STOUT, M.D., in *Texas S. J. Med.*, Mar. 1946.

Abnormal Presentations Due to Infantile Malformation

Malformations in the fetus may result in a malpresentation such as a deflexion attitude (face, brow, breech, or transverse presentation).—RAYMOND L. YOUNG, M.D., (Albuquerque, New Mexico) in *Am. J. Ob. & Gyn.*, Sept., 1946.



THUMBNAIL THERAPEUTICS

Penicillin for Mastitis

Penicillin, in doses of 25,000 units every 3 hours for 72 hours followed by 15,000 units every three hours for 48 hours, prevented abscess formation in every case of puerperal mastitis.

Lactation was inhibited by giving stilbestrol (diethylstilbestrol) in doses of 5 mg. three times daily until a total of 40 mg. had been given.

Sulfonamides were not effective in treatment of acute mastitis. Sulfathiazole cream should be used on cracked and fissured nipples.—C. P. HODGKINSON, M.D., in *J.A.M.A.*, Sept. 22, 1945.

Acrodynea

Parenteral injections of thiamin hydrochloride (vitamin B-1) are of definite help in controlling the cutaneous and neurologic manifestations of acrodynea.—E. URBACH, M.D., *Penn. Med. J.*, May, 1946.

Don't Use Sulfonamides If —

Sulfonamides should not be prescribed for any patient who has been taking them recently. Continued fever is a sign of sulfonamide poisoning; a scarlatinal rash or the acute "streptococcal throat" of agranulocytosis, should not be treated with sulfonamides.

"Eczema" may be due to sulfonamides applied locally.—S. EPSTEIN, M.D., in *Ann. Allergy*, July-August 1945.

Heart Failure

Mercurial diuretics are of value in the treatment of chronic failure of the left ventricle when dyspnea at rest and orthopnea are the prominent symptoms. Its effect is enhanced by the simultaneous administration of digitalis.—WILLIAM GOLDRING, M.D., in *N.Y.S.J.M.*, Jan. 1, 1946.

Summer and Autumn Babies

Babies born in summer and early autumn have a better prospect of survival. The chief cause of increased death rates of winter babies is the greater prevalence of communicable diseases, especially those of the respiratory tract, involving the mother, and later, the infant.—P. R. EASTMAN, M.D., in *Am. J. Pub. Health*, Sept. 1945.

Painful Tongue and Difficult Swallowing

The Plummer-Minson syndrome, characterized by glossitis, dysphagia, and hypochromic anemia, is curable by administration of iron, yeast, and by liver injections.—E. URBACH, M.D., in *Penn. Med. J.*, May, 1946.

Treatment of Edema

Mercurial diuretics may be used intravenously in the treatment of edema regardless of whether the cause is renal disease, chronic heart failure or cirrhosis of the liver, if adequate diuresis develops.—WILLIAM GOLDRING, M.D., in *N.Y.S.J.M.*, Jan. 1, 1946.

Chronic Eczema

In cases of chronic eczema, the daily administration of 20 mg. doses of thiamin hydrochloride (vitamin B-1) over a period of 3 weeks is of definite benefit.—E. URBACH, M.D., *Penn. Med. J.*, May, 1946.

Colchicine for Leukemia

Acute myelogenous leukemia may be temporarily benefited by colchicine (0.5 mg.) three times daily until diarrhea appeared, then twice daily.—W. H. KNEEDLER, M.D., in *J.A.M.A.*, Sept. '45

NEW BOOKS

Any book reviewed in these columns will be procured for our readers if the order, addressed to **CLINICAL MEDICINE**, Waukegan, Ill., is accompanied by a check for the published price of the book.

Medical Research

A Symposium. J. B. Lippincott, 1946. \$5.00.
To anyone who is carrying out research, or who thinks that he may be interested in it, this volume should be required reading.

Why does one research, and what does he hope to accomplish? Under what conditions may it best be taken? How should the results be published? What are the advantages and drawbacks to university teaching and research?

All these and many other questions are discussed by a number of men who have been connected with research from various aspects. Walter Alvarez is, as usual, at his interesting best with reminders that the general practitioner can carry out much research with a notebook and can observe patients and families over long periods of time, thus arriving at a more fundamental diagnosis than the consultant or specialist who sees one individual for a short period.

The book is warmly recommended.

Hygiene

By Florence L. Meredith, M.D., Professor of Hygiene and Public Health, Tufts College. The Blackiston Company, (4th Edition) 1946. \$4.00.

This is a readable textbook for college students, concerning physical and mental health, both from the personal and the public health points of view. The author presents the topics in a very commonsense way and transcends the usual anatomical and mechanical points of view. Her discussion on mental health, with the simple principles of mental hygiene and impulses arising from self, sex, and society are very much worth while.

This is a good book for any patient to read; for nurses and for students, even though they are not directly interested in the field of medicine. If all patients knew this material, their reaction to problems of health and disease would approach the perfection for which we hope.

Cardiovascular Disease

By David Scherf, M.D., F.A.C.P. and Linn J. Boyd, M.D., F.A.C.P. New York College, N. Y. Lippincott, 1946. \$10.00.
An authoritative book which not only discusses the modern concepts of the diagnosis and treatment of circulatory diseases but gives many pointers immediately usable in clinical practice. The discussion on dyspnea reminds the reader that obesity or emphysema may cause shortness of breath, and are not rarely treated as cases of cardiac failure. The section on heart size indicates and illustrates the tremendous change in heart size and shape with changes in the position of the diaphragm.

Clinical Methods of Neuro-Ophthalmologic Examination

By Alfred Kestenbaum, M.D., Assistant Clinical Professor of Ophthalmology New York University, New York City. Grune and Stratton, 1946. \$6.75.

A workmanlike presentation of the methods of examination in the related fields of neurology and ophthalmology. The recent literature is described and integrated into a simple, easily followed description of various tests and their significance in diagnosis. The only illustrations are a few sketches. Accurate drawings or photographs of the retina would have increased the practical value of the text.

Uterine Contractility in Pregnancy

By Douglas P. Murphy, M.D., F.A.C.S. University of Pennsylvania. Lippincott, 1946. \$5.00.

Thousands of tracings of uterine contractions taken during pregnancy and labor indicate the various standards of normal. Effects of various medications commonly employed in the practice of obstetrics are studied by this method. The tocograph is applied to the abdominal wall overlying the uterus and tracings are made. Such observations bring sound scientific observation to such clinical axioms as the relative effectiveness of pituitrin in various patients.

The Tissues of the Body

By W. E. LeGros, F.R.S., Fellow of Hertford College University of Oxford, England. Clarendon Press, Oxford University, 1945. \$7.00.

The author brings up to date the knowledge of the various tissues and organs with reference to their embryologic structure, recent studies on their cellular base, their adaptation to the stresses and strains of life.

The material is of interest to all medical students, to histologists and to the occasional physician who is interested in knowing more about the tissues with which he deals.

Gynecological and Obstetrical Pathology

By Emil Novak, M.D., Associate in Gynecology, Johns Hopkins Medical School, Baltimore, Maryland. Saunders (2nd Ed.), 1947. \$7.50.

Here is clinical practice combined with a sound knowledge of the basic pathologic process. The interplay of the endocrine is made understandable. Gross and microscopic illustrations, all excellent and many in color, make it easy to remember typical appearances.